

File 349:PCT Fulltext 1983-2000/UB=20001123, UT=20001102  
(c) 2000 WIPO/MicroPat

File 348:European Patents 1978-2000/Dec W01  
(c) 2000 European Patent Office

Set	Items	Description
S1	25793	LIQUID()CRYSTAL()DISPLAY? OR LCD
S2	1045066	FIRST OR PRIMARY(3N)LIGHT?()SOURCE?
S3	5	FIRST() (EMISSION OR BACK) ()FACE?
S4	7	SECOND() (EMISSION OR INCIDENT()END OR BACK) ()FACE?
S5	81	EMISSION()FACE?
S6	3537	BACK()FACE?
S7	1139	INCIDENT?(3N)FACE?
S8	2126	(MAJOR OR MINOR) (3N)FACE?
S9	1048	SIDE()LIGHT?
S10	1122736	ADJUST? OR ALTER? OR MODIF? OR CHANG?
S11	104197	INTENSIT?
S12	315943	ILLUMINAT? OR LIGHT?
S13	4969	S10(5N)S12(3N)S11
S14	75959	WIDE(3N)RANGE?
S15	59246	(DUAL OR TWO OR TWICE OR DIFFERENT) (3N)DIRECT?
S16	206	SURFACE()LIGHT()SOURCE?
S17	555075	VIEW? OR DISPLAY?
S18	10868	GUIDE(3N)PLATE?
S19	76	WEDGE()LIKE(5N)CROSS?()SECTION?
S20	27381	WEDGE?
S21	247688	CROSS(3N)SECTION?
S22	10349	IC=G02F
S23	0	S1(S)S2(S)S5(S)S7(S)S8(S)S9
S24	0	S1(S)S3(S)S4
S25	0	S1(S)S6(S)S7(S)S8(S)S9
S26	0	S13(S)S14(S)S15(S)S16
S27	0	S1(S)S7(S)S8
S28	80	S1(S)S13
S29	4	S28(S)S14
S30	0	S28(S)S15
S31	0	S28(S)S5
S32	0	S28(S) (S6 OR S7 OR S8 OR S9)
S33	71	S28(S) (S16 OR S17 OR S18 OR S19 OR S20 OR S21)
S34	23	S33 AND S22
S35	22	S34 NOT S29
S36	21	S35 NOT AD=19980325:20000131/PR

3/3,K/1 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT Fulltext  
(c) 2000 WIPO/MicroPat. All rts. reserv.

00702522 \*\*Image available\*\*

**DUAL DRIVE CONTINUOUSLY VARIABLE TRANSMISSION**

**TRANSMISSION A CHANGEMENT DE VITESSES CONTINU A DOUBLE ENTRAINEMENT**

Patent Applicant/Assignee:

AW BROWN CO INC, A.W. BROWN CO., INC. , Suite F, 3416 Via Lido, Newport  
Beach, CA 92663. , US

Inventor(s):

BROWN Albert W, BROWN, Albert, W. , 1207 Pembroke Lane, Newport Beach, CA  
92660 , US

Patent and Priority Information (Country, Number, Date):

Patent: WO 0015977 A2 20000323 (WO 200015977)

Application: WO 99US21059 19990914 (PCT/WO US9921059)

Priority Application: US 98100220 19980914

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK  
DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM  
TR TT TZ UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY  
KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Publication Language: English

Filing Language: English

Fulltext Word Count: 6563

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... disk and a second pulley disk. The first disk comprises a first front  
face, a **first back face** and a first hub while the second disk  
comprises a second front face, a second...

...second hub. The second hub extends at least partially within the first  
hub and the **first back face** includes a circumferential flange. A  
piston is positioned within the flange and is slidably connected to the  
**first back face** , The piston also is connected to the second hub  
through an aperture defined in the...

Claim

... disk and a second pulley disk, said first disk comprising a first  
front face, a **first back face** and a first hub, said second disk  
comprising a second front face, a second back...

...a second hub, said second hub extending at least partially within said  
first hub, said **first back face** including a circumferential  
flange, a piston being positioned within said flange and being slidably  
connected to said **first back face** , said piston also being connected  
to said second hub through an aperture defined in said...

3/3,K/2 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT Fulltext  
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00396852

**LOW PROFILE ELECTRICAL CONNECTOR**

**CONNECTEUR ELECTRIQUE DE FAIBLE EPAISSEUR**

Patent Applicant/Assignee:

BERG TECHNOLOGY INC

Inventor(s):

LEMKE Timothy

Patent and Priority Information (Country, Number, Date):

Patent: WO 9528018 A1 19951019  
Application: WO 95US4346 19950406 (PCT/WO US9504346)  
Priority Application: US 94225242 19940408  
Designated States: JP KR SG AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE  
Publication Language: English  
Fulltext Word Count: 9918

Fulltext Availability:

Claims

Claim

... said plurality of electrical contacts into a housing having a first lateral face and a **first back face** .  
to form a low profile connector substrate, said first set of electrical contacts extending from paid...  
  
...widths of said rectangle, said first connecting portion comprises said first lateral face and said **first back face** and said second connecting portion comprises a second lateral face and a second back face  
...

3/3,K/3 (Item 1 from file: 348)

DIALOG(R) File 348:European Patents

(c) 2000 European Patent Office. All rts. reserv.

00402225

**Modular concrete form.**

**Modulare Betonschalung.**

**Coffrage modulaire pour beton.**

PATENT ASSIGNEE:

Lee, Yuan-Ho, (808990), No. 851, Chung-San Road Nan-Pao Tsun, Kuei-Jen Hsian Tainan Hsieng, (TW), (applicant designated states:  
AT;BE;CH;DE;DK;ES;FR;GB;GR;IT;LI;LU;NL;SE)

INVENTOR:

Lee, Yuan-Ho, No. 851, Chung-San Road Nan-Pao Tsun, Kuei-Jen Hsian Tainan Hsieng, (TW)

LEGAL REPRESENTATIVE:

Jackson, Peter Arthur et al (32251), GILL JENNINGS & EVERY, Broadgate House, 7 Eldon Street, London EC2M 7LH, (GB)

PATENT (CC, No, Kind, Date): EP 404513 A1 901227 (Basic)  
EP 404513 B1 930217

APPLICATION (CC, No, Date): EP 90306674 900619;

PRIORITY (CC, No, Date): US 370757 890623

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: E04G-017/14; E04G-011/12;

ABSTRACT WORD COUNT: 85

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	603
CLAIMS B	(German)	EPBBF1	571
CLAIMS B	(French)	EPBBF1	702
SPEC B	(English)	EPBBF1	1891
Total word count - document A			0
Total word count - document B			3767
Total word count - documents A + B			3767

...SPECIFICATION insert rod portion 251 has a substantially rectangular cross-section and has a pair of **first opposed longitudinal faces** 253, and a pair of second opposed longitudinal faces 254. The length between the...

3/3,K/4 (Item 2 from file: 348)  
DIALOG(R)File 348:European Patents  
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00368192

**Self-contained insert mailer.**  
**Verschlossener Faltbrief fur Einlagen.**  
**Pli postal ferme pour inserts.**  
PATENT ASSIGNEE:

Bendel, Bruce, (1133360), 1545 White Oak Road, Lake Forest Illinois 60045  
, (US), (applicant designated states: DE;ES;FR;GB;IT;SE)

INVENTOR:

Bendel, Bruce, 1545 White Oak Road, Lake Forest Illinois 60045, (US)

LEGAL REPRESENTATIVE:

Harrison, David Christopher et al (31532), MEWBURN ELLIS 2 Cursitor  
Street, London EC4A 1BQ, (GB)

PATENT (CC, No, Kind, Date): EP 354758 A1 900214 (Basic)  
EP 354758 B1 930714

APPLICATION (CC, No, Date): EP 89308039 890808;

PRIORITY (CC, No, Date): US 229989 880809

DESIGNATED STATES: DE; ES; FR; GB; IT; SE

INTERNATIONAL PATENT CLASS: B65D-027/06; B65D-027/10; B42D-015/08;

ABSTRACT WORD COUNT: 123

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	1228
CLAIMS B	(German)	EPBBF1	560
CLAIMS B	(French)	EPBBF1	655
SPEC B	(English)	EPBBF1	3599
Total word count - document A			0
Total word count - document B			6042
Total word count - documents A + B			6042

...SPECIFICATION with the mailer overlying plies 12. Importantly, the fifth  
ply 24 serves as a mailer **first back** ply and the sixth ply 25 serves  
as a mailer second back ply which are...

3/3,K/5 (Item 3 from file: 348)  
DIALOG(R)File 348:European Patents  
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00342531

**Frost free heat exchanger.**  
**Frostfreier Warmeaustauscher.**  
**Echangeur de chaleur resistant au gel.**  
PATENT ASSIGNEE:

UNITED TECHNOLOGIES CORPORATION, (206570), United Technologies Building  
1, Financial Plaza, Hartford, CT 06101, (US), (applicant designated  
states: DE;FR;GB;IT;SE)

INVENTOR:

Tarasewich, Anthony, 8 Sulky Lane, Glastonbury, CT 06033, (US)  
Roberts, Fred Joseph, 32 Leonard Street, Agawam, MA 01001, (US)  
Warner, John Lawrence, 2 Vining Drive, Simsbury, CT 06070, (US)

LEGAL REPRESENTATIVE:

Klunker . Schmitt-Nilson . Hirsch (101001), Winzererstrasse 106, W-8000  
Munchen 40, (DE)

PATENT (CC, No, Kind, Date): EP 341663 A1 891115 (Basic)  
EP 341663 B1 930303

APPLICATION (CC, No, Date): EP 89108326 890509;

PRIORITY (CC, No, Date): US 191460 880509

DESIGNATED STATES: DE; FR; GB; IT; SE

INTERNATIONAL PATENT CLASS: F28F-019/00; F28F-027/02; F28F-003/08;  
F28D-009/02;

ABSTRACT WORD COUNT: 164

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	437
CLAIMS B	(German)	EPBBF1	452
CLAIMS B	(French)	EPBBF1	476
SPEC B	(English)	EPBBF1	2406
Total word count - document A			0
Total word count - document B			3771
Total word count - documents A + B			3771

...CLAIMS said inlet (18) with said manifold (98) is adapted to direct said relatively warm fluid **first to the** top portion (98) of the first channel (50).

4/3,K/1 (Item 1 from file: 349)  
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00702522 \*\*Image available\*\*

**DUAL DRIVE CONTINUOUSLY VARIABLE TRANSMISSION**

**TRANSMISSION A CHANGEMENT DE VITESSES CONTINU A DOUBLE ENTRAINEMENT**

Patent Applicant/Assignee:

AW BROWN CO INC, A.W. BROWN CO., INC. , Suite F, 3416 Via Lido, Newport  
Beach, CA 92663 , US

Inventor(s):

BROWN Albert W, BROWN, Albert, W. , 1207 Pembroke Lane, Newport Beach, CA  
92660 , US

Patent and Priority Information (Country, Number, Date):

Patent: WO 0015977 A2 20000323 (WO 200015977)

Application: WO 99US21059 19990914 (PCT/WO US9921059)

Priority Application: US 98100220 19980914

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK

DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR

LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM

TR TT TZ UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY

KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

Publication Language: English

Filing Language: English

Fulltext Word Count: 6563

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... face and a first hub while the second disk comprises a second front  
face, a **second back face** and a second hub. The second hub extends  
at least partially within the first hub...

Claim

... back face and a first hub, said second disk comprising a second front  
face, a **second back face** and a second hub, said second hub  
extending at least partially within said first hub...

4/3,K/2 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT Fulltext  
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00698489 \*\*Image available\*\*

**DIGITAL TRADING CARD, SYSTEM, AND METHOD**

**CARTES DE COLLECTION NUMERIQUES, SYSTEME ET PROCEDE**

Patent Applicant/Assignee:

CYBERACTION INC, CYBERACTION, INC., Suite 3B, 126 Fifth Avenue, New York,  
NY 10001, US

Inventor(s):

FILLER David, FILLER, David, Apartment 3008, 650 West Avenue, Miami  
Beach, FL 33139, US

TUREAUD Christian, TUREAUD, Christian, Apartment 3008, 650 West Avenue,  
Miami Beach, FL 33139, US

MARION Martin, MARION, Martin, Apartment 3, 26 Washington Square North,  
New York, NY 10011, US

SEIDMAN Deborah, SEIDMAN, Deborah, 5 Rose Hill Road, Sufer, NY 10901, US

ERSAVAS Mehmet T, ERSAVAS, Mehmet, T., Apartment 4-D, 550 West 172nd  
Street, New York, NY 10035, US

DELAPENA Michael, DELAPENA, Michael, 195 5th Avenue &3R, Brooklyn, NY  
11217, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 0011827 A1 20000302 (WO 200011827)

Application: WO 99US19040 19990819 (PCT/WO US9919040)  
Priority Application: US 98137295 19980820  
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE  
ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT  
LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT  
UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU  
TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG  
CI CM GA GN GW ML MR NE SN TD TG

Publication Language: English

Filing Language: English

Fulltext Word Count: 10142

Fulltext Availability:

Detailed Description

Detailed Description

... depicts an illustrative back face of a digital trading card; FIG. 15  
depicts an illustrative **second back face** of a digital trading card;  
FIG. 16 depicts an illustrative third back face of a...

4/3,K/3 (Item 3 from file: 349)

DIALOG(R)File 349:PCT Fulltext

(c) 2000 WIPO/MicroPat. All rts. reserv.

00396852

**LOW PROFILE ELECTRICAL CONNECTOR**

**CONNECTEUR ELECTRIQUE DE FAIBLE EPAISSEUR**

Patent Applicant/Assignee:

BERG TECHNOLOGY INC

Inventor(s):

LEMKE Timothy

Patent and Priority Information (Country, Number, Date):

Patent: WO 9528018 A1 19951019

Application: WO 95US4346 19950406 (PCT/WO US9504346)

Priority Application: US 94225242 19940408

Designated States: JP KR SG AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 9918

Fulltext Availability:

Claims

Claim

... first back face and said second connecting portion comprises a second  
lateral face and a **second back face**, the process further comprising  
the steps of:

stamping a second strip of conductive material to...

4/3,K/4 (Item 1 from file: 348)

DIALOG(R)File 348:European Patents

(c) 2000 European Patent Office. All rts. reserv.

00368192

**Self-contained insert mailer.**

**Verschlossener Faltbrief fur Einlagen.**

**Pli postal ferme pour inserts.**

PATENT ASSIGNEE:

Bendel, Bruce, (1133360), 1545 White Oak Road, Lake Forest Illinois 60045  
, (US), (applicant designated states: DE;ES;FR;GB;IT;SE)

INVENTOR:

Bendel, Bruce, 1545 White Oak Road, Lake Forest Illinois 60045, (US)

LEGAL REPRESENTATIVE:

Harrison, David Christopher et al (31532), MEWBURN ELLIS 2 Cursitor

Street, London EC4A 1BQ, (GB)  
PATENT (CC, No, Kind, Date): EP 354758 A1 900214 (Basic)  
EP 354758 B1 930714  
APPLICATION (CC, No, Date): EP 89308039 890808;  
PRIORITY (CC, No, Date): US 229989 880809  
DESIGNATED STATES: DE; ES; FR; GB; IT; SE  
INTERNATIONAL PATENT CLASS: B65D-027/06; B65D-027/10; B42D-015/08;  
ABSTRACT WORD COUNT: 123

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	1228
CLAIMS B	(German)	EPBBF1	560
CLAIMS B	(French)	EPBBF1	655
SPEC B	(English)	EPBBF1	3599
Total word count - document A			0
Total word count - document B			6042
Total word count - documents A + B			6042

...SPECIFICATION 76 so as to be easily read by Postal Service optical character reader processing equipment. The face portion 76 is separated from the flap portion 78 by a transverse fold line 71...

4/3,K/5 (Item 2 from file: 348)  
DIALOG(R)File 348:European Patents  
(c) 2000 European Patent Office. All rts. reserv.

00310820

**Semiconductor device package structure.**

**Packungsstruktur fur Halbleiteranordnung.**

**Structure d'emballage pour dispositif semi-conducteur.**

PATENT ASSIGNEE:

Director General, Agency of Industrial Science and Technology, (969150),  
1-3-1, Kasumigaseki Chiyoda-ku, Tokyo 100, (JP), (applicant designated  
states: DE;FR;GB)

INVENTOR:

Denda, Masahiko c/o LSI Kenkyusho of, Mitsubishi Denki K.K 1, Mizuhara  
4-chome, Itami City Hyogo Prefecture, (JP)

LEGAL REPRESENTATIVE:

Lawson, David Glynn et al (32891), MARKS & CLERK 57-60 Lincoln's Inn  
Fields, London WC2A 3LS, (GB)

PATENT (CC, No, Kind, Date): EP 300590 A2 890125 (Basic)  
EP 300590 A3 900711  
EP 300590 B1 931103

APPLICATION (CC, No, Date): EP 88302803 880329;

PRIORITY (CC, No, Date): JP 87181157 870722

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: H01L-021/52; H01L-023/04; H01L-031/0203;

ABSTRACT WORD COUNT: 117

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	175
CLAIMS B	(German)	EPBBF1	142
CLAIMS B	(French)	EPBBF1	180
SPEC B	(English)	EPBBF1	1841
Total word count - document A			0
Total word count - document B			2338
Total word count - documents A + B			2338

...SPECIFICATION the rectangular semiconductor device 1. The semiconductor device 1 is attached at the periphery of its back face or the second major surface 6 to the inner surface of the package top wall...



...25. The package 25 comprises a top wall 26 having a window 27 through which the **back face** or the second major surface 6 of the semiconductor device 1 is exposed and as...

4/3,K/6 (Item 3 from file: 348)

DIALOG(R) File 348:European Patents

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00292978

**Fluidic flowmeter.**

**Flussiger Durchflussmengenmesser.**

**Debitmetre fluide.**

PATENT ASSIGNEE:

OSAKA GAS CO., LTD, (237870), 1 Hiranomachi 5-chome, Higashi-ku,

Osaka-shi, Osaka, 541, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

Okabayashi, Makoto c/o Osaka Gas Co., Ltd., 1-banchi, 5-chome,

Hirano-machi, Higashi-ku Osaka, (JP)

LEGAL REPRESENTATIVE:

Schulze Horn, Stefan, Dipl.-Ing. M.Sc. (10811), Goldstrasse 36, W-4400  
Munster, (DE)

PATENT (CC, No, Kind, Date): EP 295623 A1 881221 (Basic)

EP 295623 B1 920115

APPLICATION (CC, No, Date): EP 88109456 880614;

PRIORITY (CC, No, Date): JP 87149492 870616; JP 87170206 871106; JP

87170199 871107; JP 87171817 871109; JP 8850886 880303

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G01F-001/20;

ABSTRACT WORD COUNT: 221

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	1001
CLAIMS B	(German)	EPBBF1	833
CLAIMS B	(French)	EPBBF1	1104
SPEC B	(English)	EPBBF1	4964
Total word count - document A			0
Total word count - document B			7902
Total word count - documents A + B			7902

...SPECIFICATION substantially semicylindrical outer peripheral faces.

In this case also, the configurations of the first and **second curved faces** 11a, 11b and 11c of the second partition wall 11 may be conveniently varied as...

...have a semicylindrical or substantially semicylindrical configuration extending from a front face 12a to a **back face** 12c opposite to the front face 12a. This configuration is advantageous in that there will...

...front face 12a may have different shapes. Or, as shown in Fig. 25(c), the **back face** 12c may be formed as a convex face gradually receding towards the center thereof. Further...

4/3,K/7 (Item 4 from file: 348)

DIALOG(R) File 348:European Patents

(c) 2000 European Patent Office. All rts. reserv.

00270575

**Quick connect coupling.**

**Schnellkupplung.**

**Raccord rapide.**

PATENT ASSIGNEE:

THE GATES RUBBER COMPANY, (242193), 990 South Broadway, Denver Colorado  
80209, (US), (applicant designated states: DE;ES;FR;GB;IT;SE)

INVENTOR:

Chohan, Satish M., 2865 Soland Drive, Rockford Illinois 61111, (US)

Antosch, Jerry J., 501 James Avenue, Rockford Illinois 61107, (US)

LEGAL REPRESENTATIVE:

Carpmael, John William Maurice et al (29161), CARPMAELS & RANSFORD 43  
Bloomsbury Square, London, WC1A 2RA, (GB)

PATENT (CC, No, Kind, Date): EP 265065 A2 880427 (Basic)  
EP 265065 A3 880817  
EP 265065 B1 910710

APPLICATION (CC, No, Date): EP 87308039 870911;

PRIORITY (CC, No, Date): US 922482 861023

DESIGNATED STATES: DE; ES; FR; GB; IT; SE

INTERNATIONAL PATENT CLASS: F16L-037/08;

ABSTRACT WORD COUNT: 75

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	708
CLAIMS B	(German)	EPBBF1	689
CLAIMS B	(French)	EPBBF1	795
SPEC B	(English)	EPBBF1	1841
Total word count - document A			0
Total word count - document B			4033
Total word count - documents A + B			4033

...CLAIMS a first end portion (32) juxtaposed a side portion of the O-ring  
(24) that **oppositely faces** the annular shoulder (26).  
3. A female coupling (10) as claimed in claim 2 wherein...

29/3,K/1 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT Fulltext  
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00445291

**LIGHT INTENSITY REDUCTION APPARATUS AND METHOD**  
**PROCEDE ET APPAREIL D'ATTENUATION DE L'INTENSITE LUMINEUSE**

Patent Applicant/Assignee:

BARNES Elwood E

Inventor(s):

BARNES Elwood E

Patent and Priority Information (Country, Number, Date):

Patent: WO 9641231 A1 19961219

Application: WO 96US9305 19960606 (PCT/WO US9609305)

Priority Application: US 95476421 19950607

Designated States: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB  
GE HU IS JP KE KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO  
RU SD SE SG SI TM TR TT UA UG US UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ  
MD RU TJ TM AT DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI  
CM GA GN ML MR TD TG

Publication Language: English

Fulltext Word Count: 9586

Fulltext Availability:

Detailed Description

Detailed Description

... liquid crystal materials in general, or other materials having light transmission characteristics that can be **changed** over a **wide range** of **light intensities**, could be used to functionally replace the LCD materials in the shutter matrices or sensor arrays. The left LCD lens 4 contains a sensor array 6, and the right LCD lens 5 contains a sensor array 7, mounted on the outside edge near the connections...

29/3,K/2 (Item 1 from file: 348)  
DIALOG(R)File 348:European Patents  
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00399451

**Projection type liquid crystal display unit.**

**Projektionsflussigkristallanzeigevorrichtung.**

**Dispositif d'affichage a cristal liquide du type a projection.**

PATENT ASSIGNEE:

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD., (216883), 1006, Oaza Kadoma,  
Kadoma-shi, Osaka-fu, 571, (JP), (applicant designated states:  
DE;FR;GB)

INVENTOR:

Yamagishi, Nobuyasu, 11-21, Nagisasakaemachi, Hirakata-shi, (JP)

Watanabe, Hiroshi, 188-12, Yawata Fukurokudani, Yawata-shi, Kyoto, (JP)

Yokoyama, Kazuo, 16-26, Nagao Tanimachi-3-chome, Hirakata-shi, (JP)

LEGAL REPRESENTATIVE:

Votier, Sidney David et al (37081), CARPMAELS & RANSFORD 43, Bloomsbury  
Square, London WC1A 2RA, (GB)

PATENT (CC, No, Kind, Date): EP 390511 A2 901003 (Basic)  
EP 390511 A3 920318  
EP 390511 B1 951018

APPLICATION (CC, No, Date): EP 90303273 900328;

PRIORITY (CC, No, Date): JP 8978845 890329

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: H04N-009/31; G02F-001/1335;

ABSTRACT WORD COUNT: 126

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text Language Update Word Count

CLAIMS A	(French)	EPAB95	886
SPEC A	(English)	EPAB95	5931
Total word count - document A			8278
Total word count - document B			0
Total word count - documents A + B			8278

...SPECIFICATION cell, can be suppressed advantageously. Furthermore, a plurality of liquid crystal cells used in the **liquid crystal display** unit can have the same optical characteristics, so that liquid crystal cells of an identical e., spectral transmission **characteristics** corresponding to the **light intensity** distribution of the incident **light**, by suitably determining the **angles** of optical axes of the phase plate and **polarization means**. Furthermore, in view of a change in spectral transmission characteristic due to change in temperature...

29/3,K/3 (Item 2 from file: 348)  
 DIALOG(R)File 348:European Patents  
 (c) 2000 European Patent Office. All rts. reserv.

00302986

**Ferroelectric liquid crystal composition.**  
**Ferroelektrische Flüssigkristallzusammensetzung.**  
**Composition liquide cristalline ferroelectrique.**  
 PATENT ASSIGNEE:

Chisso Corporation, (201680), 6-32, Nakanoshima 3-chome Kita-ku,  
 Osaka-shi Osaka-fu, (JP), (applicant designated states:  
 AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE)

INVENTOR:

Terashima, Kanetsugu, 8890, Goi, Ichihara-shi Chiba-ken, (JP)  
 Ichihashi, Mitsuyoshi, 17, Tatsumidai Higashi 2-chome, Ichihara-shi  
 Chiba-ken, (JP)  
 Kikuchi, Makoto, 1708-7, Jozai, Kisarazu-shi Chiba-ken, (JP)  
 Takeshita, Fusayuki, 17, Tatsumidai Higashi 2-chome, Ichihara-shi  
 Chiba-ken, (JP)  
 Furukawa, Kenji, 16-7, Kurihama 1-chome, Yokosuka-shi Kanagawa-ken, (JP)

LEGAL REPRESENTATIVE:

Hansen, Bernd, Dr.rer.nat. et al (4922), Hoffmann, Eitle & Partner  
 Patentanwalte Arabellastrasse 4 Postfach 81 04 20, W-8000 Munchen 81,  
 (DE)

PATENT (CC, No, Kind, Date): EP 318028 A2 890531 (Basic)  
 EP 318028 A3 901024  
 EP 318028 B1 930721

APPLICATION (CC, No, Date): EP 88119674 881125;

PRIORITY (CC, No, Date): JP 87296055 871126

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: C09K-019/42; C09K-019/46;

ABSTRACT WORD COUNT: 133

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	603
CLAIMS B	(German)	EPBBF1	554
CLAIMS B	(French)	EPBBF1	657
SPEC B	(English)	EPBBF1	6123
Total word count - document A			0
Total word count - document B			7937
Total word count - documents A + B			7937

...SPECIFICATION of 0.5 Hz and 20 V was applied to the cell. In the thus **formed liquid crystal display** element, switching behavior was sharp and was very excellent in contrast (1 :20), and response time was short, 40 (mu)sec at 25(degree)C.  
 Example 14...

29/3,K/4 (Item 3 from file: 348)  
DIALOG(R)File 348:European Patents  
(c) 2000 European Patent Office. All rts. reserv.

00139302

**A multicolor liquid crystal display**

**Vielfarb-Flussigkristallanzeigevorrichtung**

**Dispositif d'affichage a cristal liquide en plusieurs couleurs**

PATENT ASSIGNEE:

XEROX CORPORATION, (219781), Xerox Square - 020, Rochester New York 14644  
, (US), (applicant designated states: DE;FR;GB;IT)

INVENTOR:

Dir, Gary A., 16 Gateway Road, Fairport New York 14450, (US)

LEGAL REPRESENTATIVE:

Johnson, Reginald George et al (32372), Rank Xerox Ltd Patent Department  
Parkway, Marlow Buckinghamshire SL7 1YL, (GB)

PATENT (CC, No, Kind, Date): EP 121305 A2 841010 (Basic)  
EP 121305 A3 870325  
EP 121305 B1 920325

APPLICATION (CC, No, Date): EP 84300845 840210;

PRIORITY (CC, No, Date): US 480162 830329

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: G02F-001/137

ABSTRACT WORD COUNT: 134

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9841	1003
CLAIMS B	(German)	9841	925
CLAIMS B	(French)	9841	1047
SPEC B	(English)	9841	7589
Total word count - document A			0
Total word count - document B			10564
Total word count - documents A + B			10564

...SPECIFICATION a contrast in transmission of 3.69 was obtained which is within 3% of the **maximum** of 3.8. If Sanritz Limited LC-82-13's are used, a contrast ratio of...

36/3,K/1 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT Fulltext  
(c) 2000 WIPO/MicroPat. All rts. reserv.

00416289

**TRANSPORTABLE COMPUTER SYSTEMS HAVING PLURAL VIEWING MODES  
ORDINATEURS PORTABLES A PLUSIEURS MODES DE VISUALISATION**

Patent Applicant/Assignee:

REVEO INC  
FARIS Sadeg M  
TUNG Carl

Inventor(s):

FARIS Sadeg M  
TUNG Carl

Patent and Priority Information (Country, Number, Date):

Patent: WO 9612210 A1 19960425  
Application: WO 95US12846 19951012 (PCT/WO US9512846)  
Priority Application: US 94322219 19941013

Designated States: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU  
IS JP KE KG KP LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE SG  
SI SK TJ TM TT US UZ VN KE MW SD SZ UG AT BE CH DE DK ES FR GB GR IE IT  
LU MC NL PT SE CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 21930

Main International Patent Class: G02F-001/1335 ;

Fulltext Availability:

Detailed Description

Detailed Description

... rays of light produced from the light projection device thereof is directly transmitted through the **display** panel assembly of the computer system 170, and thence through projection lens 179, without undergoing...

...27, this light projection arrangement results in improved light transmission through the Fresnel lens and **LCD** panel subassembly, and thus projected images with enhanced brightness when using the same **intensity light** source.

In Fig. 14, an **alternative** projection arrangement is shown for the computer-based system of Fig. 4. In this alternative...

36/3,K/2 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT Fulltext  
(c) 2000 WIPO/MicroPat. All rts. reserv.

00334489

**INTELLIGENT ELECTRO-OPTICAL SYSTEM AND METHOD FOR AUTOMATIC GLARE REDUCTION  
PROCEDE ET SYSTEME ELECTRO-OPTIQUE ET INTELLIGENT POUR LA REDUCTION  
AUTOMATIQUE DE L'EBLOUISSEMENT**

Patent Applicant/Assignee:

REVEO INC

Inventor(s):

FARIS Sadeg M

Patent and Priority Information (Country, Number, Date):

Patent: WO 9321624 A1 19931028  
Application: WO 93US3518 19930414 (PCT/WO US9303518)  
Priority Application: US 92869566 19920415

Designated States: CA JP KR AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 9257

International Patent Class: H04N-007/18; G02F-001/13 ; G02B-027/00;  
G02B-023/10;

Fulltext Availability:

Detailed Description

Detailed Description

... in practicing the present invention, reference is made to the following publications: "Reverse Mode MicroDroplet Liquid Crystal Display " by Y.D. Ma and B.G. Ra, on pages 46-57, SPIE Vol. 1257, Liquid Crystal Displays and Application (1990); and "Polymer-Dispersed and Encapsulated Liquid Crystal Films", by G. Paul Montgomery...

36/3,K/3 (Item 1 from file: 348)

DIALOG(R)File 348:European Patents

(c) 2000 European Patent Office. All rts. reserv.

01073970

DIFFUSER, ILLUMINATING DEVICE AND LIQUID CRYSTAL DISPLAY

DIFFUSOR, BELEUCHTUNGSVORRICHTUNG UND FLUSSIGKRISTALLANZEIGE.

DIFFUSEUR, DISPOSITIF D'ECLAIRAGE ET AFFICHAGE A CRISTAUX LIQUIDES

PATENT ASSIGNEE:

SHISEIDO COMPANY LIMITED, (573133), 7-5-5, Ginza, Chuo-ku Tokyo 104-10, (JP), (Applicant designated States: all)

INVENTOR:

MIYAMOTO, Tsuyoshi, Shiseido Research Center (1), 1050, Nippa-cho, Kohoku-ku, Yokohama-shi, Kanagawa 223, (JP)

KIMURA, Asa, Shiseido Research Center (1), 1050, Nippa-cho, Kohoku-ku, Yokohama-shi, Kanagawa 223, (JP)

LEGAL REPRESENTATIVE:

Henkel, Feiler, Hanzel (100401), Mohlstrasse 37, 81675 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 971246 A1 000112 (Basic)

WO 9938036 990729

APPLICATION (CC, No, Date): EP 98900733 980126; WO 98JP297 980126

DESIGNATED STATES: DE; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS: G02B-005/02; G02F-001/1335 ; F21V-008/00; G09F-009/00; C09C-001/40

ABSTRACT WORD COUNT: 89

LANGUAGE (Publication,Procedural,Application): English; English; Japanese  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200002	682
SPEC A	(English)	200002	10629
Total word count - document A			11311
Total word count - document B			0
Total word count - documents A + B			11311

...INTERNATIONAL PATENT CLASS: G02F-001/1335

...SPECIFICATION light of specific wave range to the diffusing film.

The above-mentioned guest-host type liquid crystal display uses a mixture of dichromatic coloring dyes as the liquid crystal and changes the color of the transmitted light and its intensity by controlling the direction of the coloring dyes molecular to the incident light by the ...

36/3,K/4 (Item 2 from file: 348)

DIALOG(R)File 348:European Patents

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00997409

ANTI-FERROELECTRIC LIQUID CRYSTAL CELL

ANTIFERROELEKTRISCHFLUSSIGKRISTALL ZELLE

CELLULE A CRISTAUX LIQUIDES ANTI-FERROELECTRIQUES

PATENT ASSIGNEE:

Citizen Watch Co., Ltd., (628277), 1-1, Nishi-Shinjuku 2-chome, Shinjuku-ku, Tokyo 163-0428, (JP), (applicant designated states: DE;FR;GB)

MITSUBISHI GAS CHEMICAL COMPANY, INC., (287634), 5-2, Marunouchi 2-chome,

Chiyoda-ku, Tokyo 100-8324, (JP), (applicant designated states:  
DE;FR;GB)

INVENTOR:

SUZUKI, Yasushi, Citizen Watch Co., Ltd. Tech. Lab, 840, Aza Takeno Oaza  
Shimotomi Tokorozawa-shi, Saitama 359-8511, (JP)

SUGURO, Akira, Citizen Watch Co., Ltd. Tech. Lab., 840, Aza Takeno Oaza  
Shimotomi Tokorozawa-shi, Saitama 359-8511, (JP)

YUI, Tomoyuki, Mitsubishi Gas Chem. Co. Inc., Corp. Res. Lab. 22, Wadai  
Tsukuba-shi, Tabaraki 300-4242, (JP)

JOHNO, Masahiro, Mitsubishi Gas Chem. Co. Inc., Corp. Res. Lab. 22, Wadai  
Tsukuba-shi, Ibaraki 300-4242, (JP)

MATSUMOTO, Takahiro, Mitsubishi Gas Chem. Inc., Corp. Res. Lab. 22, Wadai  
Tsukuba-shi, Ibaraki 300-4242, (JP)

LEGAL REPRESENTATIVE:

Wilhelm, Hans-Herbert, Dr.-Ing. et al (13162), Wilhelm & Dauster  
Patentanwalte Hospitalstrasse 8, 70174 Stuttgart, (DE)

PATENT (CC, No, Kind, Date): EP 913449 A1 990506 (Basic)  
WO 9842801 981001

APPLICATION (CC, No, Date): EP 98909775 980319; WO 98JP1195 980319

PRIORITY (CC, No, Date): JP 9770135 970324

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: C09K-019/02; G02F-001/137

ABSTRACT WORD COUNT: 172

LANGUAGE (Publication,Procedural,Application): English; English; Japanese  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9918	243
SPEC A	(English)	9918	5066
Total word count - document A			5309
Total word count - document B			0
Total word count - documents A + B			5309

...INTERNATIONAL PATENT CLASS: G02F-001/137

...SPECIFICATION shows the result of an experiment conducted for evaluating the image sticking phenomenon of the **liquid crystal display** panel prepared using antiferroelectric liquid crystal cells according to the first embodiment and a reference. In this experiment, first, white was written in each of the **liquid crystal display** panels prepared using the antiferroelectric liquid crystal cells according to the first embodiment and the reference. Then, the **change** A of the **intensity** of the transmitted **light** with black written in and the temporal **change** B of the **intensity** of the transmitted **light** after black was written were determined and plotted.

The characteristic indicated by solid line in...

36/3,K/5 (Item 3 from file: 348)

DIALOG(R)File 348:European Patents

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00930935

ORIENTATED FILM HAVING PORES

ORIENTIERTER FILM MIT POREN

FILM ORIENTE AVEC PORES

PATENT ASSIGNEE:

TEIJIN LIMITED, (212526), 6-7, Minamihommachi 1-chome Chuo-ku, Osaka-shi,  
Osaka 541, (JP), (applicant designated states: DE;FR;GB;NL)

INVENTOR:

UCHIYAMA, Akihiko, Tokyo Res. Center, Teijin Ltd., 3-2, Asahigaoka  
4-chome, Hino-shi, Tokyo 191, (JP)

YATABE, Toshiaki, Tokyo Res. Center, Teijin Ltd., 3-2, Asahigaoka 4-chome  
, Hino-shi, Tokyo 191, (JP)

LEGAL REPRESENTATIVE:

Hansen, Bernd, Dr. Dipl.-Chem. et al (4924), Hoffmann Eitle, Patent- und



Rechtsanwalte, Arabellastrasse 4, 81925 Munchen, (DE)  
PATENT (CC, No, Kind, Date): EP 859246 A1 980819 (Basic)  
WO 9805984 980212  
APPLICATION (CC, No, Date): EP 97933893 970804; WO 97JP2700 970804  
PRIORITY (CC, No, Date): JP 96220748 960805; JP 96352574 961216  
DESIGNATED STATES: DE; FR; GB; NL  
INTERNATIONAL PATENT CLASS: G02B-005/02; G02B-005/30; G02F-001/1335 ;  
C08J-009/00; B32B-017/10; B32B-007/02  
ABSTRACT WORD COUNT: 106

LANGUAGE (Publication,Procedural,Application): English; English; Japanese  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9834	1003
SPEC A	(English)	9834	14847
Total word count - document A			15850
Total word count - document B			0
Total word count - documents A + B			15850

...INTERNATIONAL PATENT CLASS: G02F-001/1335

...SPECIFICATION the film 4 directing the drawing axis in the lateral direction of the screen, the **viewing** angle in vertical direction was nearly the same as the angle free from the film...

...gradation and the darkening of the image was confirmed in the lateral direction. The frontal **light intensity** (Y) and the **change** in the contrast in lateral direction were observed by attaching the film 4 to a **liquid crystal display** device evaluation apparatus of Ohtsuka Denshi Co. (LCD5100), and the intensity with the film was...

36/3,K/6 (Item 4 from file: 348)  
DIALOG(R)File 348:European Patents  
(c) 2000 European Patent Office. All rts. reserv.

00893235

Liquid crystal display  
Flussigkristallvorrichtung  
Dispositif a crystal liquide

PATENT ASSIGNEE:

Hitachi, Ltd., (204141), 6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo  
101-0062, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

Kawachi, Genshiro, Moriyama Apt. 105, 17-2, Moriyama-cho 3-chome,  
Hitachi-shi, Ibaraki 316, (JP)  
Mikami, Yoshiro, 7-6-403, Omika-cho 6-chome, Hitachi-shi, Ibaraki 316,  
(JP)

LEGAL REPRESENTATIVE:

Beetz & Partner Patentanwalte (100712), Steinsdorfstrasse 10, 80538  
Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 816903 A1 980107 (Basic)  
APPLICATION (CC, No, Date): EP 97111177 970703;  
PRIORITY (CC, No, Date): JP 96173188 960703  
DESIGNATED STATES: DE; FR; GB  
INTERNATIONAL PATENT CLASS: G02F-001/136  
ABSTRACT WORD COUNT: 146

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9802	1570
SPEC A	(English)	9802	9447
Total word count - document A			11017
Total word count - document B			0
Total word count - documents A + B			11017

INTERNATIONAL PATENT CLASS: G02F-001/136

...SPECIFICATION in a space therebetween.

Since this embodiment of the invention is of a reflection type display, incident light comes from a light source provided outside counterposed glass substrate 508, and this...

...a mirror-finished surface of picture element electrode 130. A TFT driven reflection type color liquid crystal display according to the invention is thus provided in which intensity of reflected light is adjusted in the portion of liquid crystal layer 506. In this type of reflection type display, since the backlight which consumes considerable electric power is eliminated, a low power consuming liquid crystal display can be realized. Further, if the above-mentioned semiconductor device of the invention is utilized...

...matrix substrate components can be reduced, there can be realized a very low power consuming liquid crystal display. This type of liquid crystal display of the invention is most preferable for use as an image display device in a portable information terminal which is driven by dry cells.

As described heretofore...

36/3,K/7 (Item 5 from file: 348)

DIALOG(R) File 348:European Patents

(c) 2000 European Patent Office. All rts. reserv.

00718428

Color liquid crystal display device and liquid crystal display apparatus  
Flussigkristall-Farbanzeigevorrichtung und Flussigkristallanzeigegerat  
Dispositif d'affichage en couleurs a cristal liquide et appareil  
d'affichage a cristal liquide

PATENT ASSIGNEE:

Casio Computer Co., Ltd., (249364), 6-2, Hon-machi 1-chome, Shibuya-ku,  
Tokyo 151-8543, (JP), (Proprietor designated states: all)

INVENTOR:

Kikuchi, Zenta, c/o Casio Computer Co., Ltd. Jpc., Hamura R&D Center,  
2-1, Sakae-cho 3-chome, Hamura-shi, Tokyo, 205, (JP)

Yoshida, Tesuchi, c/o Casio Computer Co., Ltd. Jpc, Hamura R&D Center,  
2-1, Sakae-cho 3-chome, Hamura-shi, Tokyo, 205, (JP)

Aoki, Hisashi, c/o Casio Computer Co., Ltd. Jpc, Hamura R&D Center, 2-1,  
Sakae-cho 3-chome, Hamura-shi, Tokyo, 205, (JP)

LEGAL REPRESENTATIVE:

Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721)  
, Maximilianstrasse 58, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 679923 A2 951102 (Basic)

EP 679923 A3 960103

EP 679923 B1 000209

APPLICATION (CC, No, Date): EP 95106370 950427;

PRIORITY (CC, No, Date): JP 94111673 940428; JP 94111687 940428; JP

94111694 940428; JP 94111845 940428; JP 94167543 940628; JP 94167545  
940628

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G02F-001/139 ; G02F-001/1335 ; G09G-003/36

ABSTRACT WORD COUNT: 336

NOTE:

Figure number on first page: 3

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200006	1223
CLAIMS B	(German)	200006	1091
CLAIMS B	(French)	200006	1365

SPEC B (English) 200006 12904  
Total word count - document A 0  
Total word count - document B 16583  
Total word count - documents A + B 16583

INTERNATIONAL PATENT CLASS: G02F-001/139 ...  
...G02F-001/1335

...CLAIMS colors in accordance with other applied voltages than said highest applied voltage.

12. The color liquid crystal display device according to claim 12, characterized in that said color liquid crystal display device is arranged to have a first operation range in which said color liquid crystal display device operates in a first voltage range including said highest voltage, and an intensity of light leaving from said polarization plate (13) changes with a nearly constant wavelength distribution in accordance with an applied voltage, and to have a second operation range in which said color liquid crystal display device operates in a second voltage range lower than said first voltage range, and a...

36/3,K/8 (Item 6 from file: 348)  
DIALOG(R)File 348:European Patents  
(c) 2000 European Patent Office. All rts. reserv.

00631544

Liquid crystal display having a wide viewing angle  
Flussigkristall-Anzeige mit weitem Sichtwinkel  
Dispositif d'affichage a cristaux liquides avec grand angle d'observation  
PATENT ASSIGNEE:

TEKTRONIX, INC., (1893633), 26600 S.W. Parkway, P.O. Box 1000,  
Wilsonville, Oregon 97070, (US), (applicant designated states:  
DE;FR;GB)

INVENTOR:

Bos, Philip J., 6806 Windsor Road, Hudson, Ohio 44236, (US)

LEGAL REPRESENTATIVE:

Burke, Steven David et al (47741), R.G.C. Jenkins & Co. 26 Caxton Street,  
London SW1H 0RJ, (GB)

PATENT (CC, No, Kind, Date): EP 614107 A1 940907 (Basic)  
EP 614107 B1 981118

APPLICATION (CC, No, Date): EP 94301431 940228;

PRIORITY (CC, No, Date): US 25486 930303

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G02F-001/1335 ; G02F-001/137

ABSTRACT WORD COUNT: 150

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9847	877
CLAIMS B	(German)	9847	786
CLAIMS B	(French)	9847	970
SPEC B	(English)	9847	4934
Total word count - document A			0
Total word count - document B			7567
Total word count - documents A + B			7567

INTERNATIONAL PATENT CLASS: G02F-001/1335 ...

...G02F-001/137

...SPECIFICATION screen television and color computer applications, viewing angle improvements are needed.

A clearer understanding of viewing angle factors follows with reference to Fig. 1. An LCD 10 having a front surface 12 and a rear surface 14 is illuminated from behind rear surface 14 by a light source

16. LCD 10 has a viewing axis 18 that is shown as a dashed line normal to the center of front surface 12 of LCD 10. An observer's eye located on viewing axis 18 at a position 20 views LCD 10 "on axis." If the observer's eye moves off axis to a position 22, LCD 10 is viewed at a viewing angle 24 with respect to viewing axis 18. LCD 10 can be viewed with a constant viewing angle 24 anywhere around a viewing circle 26. Positions around viewing circle 26 are at an azimuthal angle 28 relative to a reference point 30 on viewing circle 26. As the observer views LCD 10 from various viewing and azimuthal angles, the perceived light may change in intensity, contrast ratio, or color. The degree of change may not be acceptable depending on the optical transmission characteristics of LCD 10 and the application.

Figs. 2A, 2B, and 2C show, for a prior art twisted...

36/3,K/9 (Item 7 from file: 348)  
 DIALOG(R) File 348:European Patents  
 (c) 2000 European Patent Office. All rts. reserv.

00621650

Illumination system and display device including such a system  
 Beleuchtungssystem und ein solches System umfassendes Anzeigegerat  
 Systeme d'illumination et dispositif d'affichage comportant un tel systeme  
 PATENT ASSIGNEE:

Koninklijke Philips Electronics N.V., (200769), Groenewoudseweg 1, 5621  
 BA Eindhoven, (NL), (applicant designated states: DE;FR;GB;IT)

INVENTOR:

De Vaan, Adrianus Johannes Stephanus Maria, c/o INT. OCTROOIBUREAU B.V.,  
 Prof. Holstlaan 6, NL-5656 AA Eindhoven, (NL)  
 Schaareman, Paulus Bartholomeus Johannes, c/o INT. OCTROOIBUREAU B.V.,  
 Prof. Holstlaan 6, NL-5656 AA Eindhoven, (NL)

LEGAL REPRESENTATIVE:

Faessen, Louis Marie Hubertus et al (19891), INTERNATIONAAL OCTROOIBUREAU  
 B.V., Prof. Holstlaan 6, 5656 AA Eindhoven, (NL)

PATENT (CC, No, Kind, Date): EP 606939 A1 940720 (Basic)  
 EP 606939 B1 980506

APPLICATION (CC, No, Date): EP 94200023 940106;

PRIORITY (CC, No, Date): EP 93200056 930111

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: G02F-001/1335 ; G02F-001/00 ; H04N-009/31;  
 G02B-005/30

ABSTRACT WORD COUNT: 118

LANGUAGE (Publication,Procedural,Application): English; English; Dutch  
 FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9819	682
CLAIMS B	(German)	9819	618
CLAIMS B	(French)	9819	717
SPEC B	(English)	9819	7293
Total word count - document A			0
Total word count - document B			9310
Total word count - documents A + B			9310

INTERNATIONAL PATENT CLASS: G02F-001/1335 ...

...G02F-001/00

...SPECIFICATION by a viewer 9 in the space behind the projection screen.

As already noted, the display panel is preferably irradiated with linearly polarized light, while the panel elements rotate or do...

...90(degree). In principle, it is also possible to operate an image projection device having liquid crystal display panels with circularly or elliptically polarized light instead of with linearly polarized light. The display panel can then change the direction of

rotation of the circularly polarized light or the ratio of the elliptical axes of the elliptically polarized light . Said **changes** can be converted into an **intensity** modulation by using extra polarization means.

If the image projection device is a color image...

36/3,K/10 (Item 8 from file: 348)

DIALOG(R)File 348:European Patents

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00599390

**Antiferroelectric liquid crystal composite material, process for preparing the same, and liquid crystal element using the same**

**Antiferroelektrisches, flussigkristallines Verbundmaterial, Verfahren zur dessen Herstellung sowie Flussigkristallelement zur dessen Anwendung**

**Materiau composite de liquide cristallin anti-ferro-electrique, procede pour sa preparation et element de liquide cristallin l'utilisant**

PATENT ASSIGNEE:

MITSUI PETROCHEMICAL INDUSTRIES, LTD., (213640), 2-5, Kasumigaseki 3-chome Chiyoda-ku, Tokyo 100, (JP), (applicant designated states: DE;FR;GB;IT;NL)

INVENTOR:

Nishiyama, Shinichi, c/o MITSUI PETRO. IND., LTD., 580-32, Aza-Taku 2-gou, Nagaura, Sodegaura-shi, Chiba 299-02, (JP)

Nagai, Mitsuko, c/o MITSUI PETRO. IND., LTD., 580-32, Aza-Taku 2-gou, Nagaura, Sodegaura-shi, Chiba 299-02, (JP)

Hama, Hideo, c/o MITSUI PETRO. IND., LTD., 580-32, Aza-Taku 2-gou, Nagaura, Sodegaura-shi, Chiba 299-02, (JP)

Yamanaka, Tooru, c/o MITSUI PETRO. IND., LTD., 580-32, Aza-Taku 2-gou, Nagaura, Sodegaura-shi, Chiba 299-02, (JP)

LEGAL REPRESENTATIVE:

Cresswell, Thomas Anthony et al (50352), J.A. KEMP & CO. 14 South Square Gray's Inn, London WC1R 5LX, (GB)

PATENT (CC, No, Kind, Date): EP 587280 A1 940316 (Basic)  
EP 587280 B1 970226

APPLICATION (CC, No, Date): EP 93305469 930713;

PRIORITY (CC, No, Date): JP 92186690 920714; JP 93103249 930428

DESIGNATED STATES: DE; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS: C09K-019/02; C09K-019/32; C09K-019/42;  
C09K-019/54; **G02F-001/1333**

ABSTRACT WORD COUNT: 112

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF2	864
CLAIMS B	(English)	EPAB97	909
CLAIMS B	(German)	EPAB97	819
CLAIMS B	(French)	EPAB97	970
SPEC A	(English)	EPABF2	8532
SPEC B	(English)	EPAB97	8373
Total word count - document A			9398
Total word count - document B			11071
Total word count - documents A + B			20469

...INTERNATIONAL PATENT CLASS: **G02F-001/1333**

...SPECIFICATION reflected light from a liquid crystal element surface such as a display panel of a **liquid crystal display** device is electrically changed, it is desired that the electrooptical **change** of the reflected **light intensity** can be made at a high speed. Also in the case of using a liquid crystal element as the optical switching element, it is desired that an electrooptical **change** of an **intensity** of a transmitted **light** passing through the liquid crystal element can be made at a high speed.

However, when...

...SPECIFICATION an intensity of a reflected light from a liquid crystal element surface such as a **display** panel of a **liquid crystal display** device is electrically changed, it is desired that the electrooptical **change** of the reflected **light intensity** can be made at a high speed. Also in the case of using a liquid crystal element as the optical switching element, it is desired that an electrooptical **change** of an **intensity** of a transmitted **light** passing through the liquid crystal element can be made at a high speed.

However, when...

36/3,K/11 (Item 9 from file: 348)

DIALOG(R)File 348:European Patents

(c) 2000 European Patent Office. All rts. reserv.

00570809

Method for driving a liquid crystal display

Verfahren zur Ansteuerung einer Flüssigkristall- Anzeigevorrichtung

Procede de commande d' un afficheur a cristal liquide

PATENT ASSIGNEE:

SHARP KABUSHIKI KAISHA, (260713), 22-22 Nagaike-cho Abeno-ku, Osaka, (JP)  
, (applicant designated states: DE;GB;NL)

INVENTOR:

Koden, Mitsuhiro, 2-1-30-503, 5-chome, Suzaku, Nara-shi, Nara-ken, (JP)

Tagawa, Akira, 1-23-17, Shirakashi-cho, Kashihara-shi, Nara-ken, (JP)

Takeda, Hitoshi, 2613-1, Ichinomoto-cho, Tenri-shi, Nara-ken, (JP)

Katsuse, Hirofumi, Akebono-ryo, 2613-1, Ichinomoto-cho, Tenri-shi,  
Nara-ken, (JP)

Shiomi, Makoto, 1013 Raporu Tenri, 2613-1, Ichinomoto-cho, Tenri-shi,  
Nara-ken, (JP)

Numao, Takaji, 1-1-302, Kunimi-cho, Saidaiji, Nara-shi, Nara-ken, (JP)

Gouda, Hiroshi, 2613-1, Ichinomoto-cho,, Tenri-shi, Nara-ken, (JP)

Katakami, Masayuki, 12-7, 3-chome, Ukyo, Nara-shi, Nara-ken, (JP)

Kondo, Naofumi, 4-6-21, Wakaba-dai, Nara-shi, Nara-ken, (JP)

Katayama, Mikio, 1879-51-704, Tawaraguchi-cho, Ikoma-shi, Nara-ken, (JP)

LEGAL REPRESENTATIVE:

White, Martin David et al (37651), MARKS & CLERK, 57/60 Lincoln's Inn  
Fields, London WC2A 3LS, (GB)

PATENT (CC, No, Kind, Date): EP 554109 A1 930804 (Basic)  
EP 554109 B1 980805

APPLICATION (CC, No, Date): EP 93300664 930129;

PRIORITY (CC, No, Date): JP 9213767 920129; JP 92173495 920630; JP 92185186  
920713; JP 92199841 920727; JP 92310553 921119

DESIGNATED STATES: DE; GB; NL

INTERNATIONAL PATENT CLASS: G09G-003/36; G02F-001/137

ABSTRACT WORD COUNT: 157

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9832	1201
CLAIMS B	(German)	9832	1143
CLAIMS B	(French)	9832	1336
SPEC B	(English)	9832	11041

Total word count - document A 0

Total word count - document B 14721

Total word count - documents A + B 14721

...INTERNATIONAL PATENT CLASS: G02F-001/137

...SPECIFICATION invention; and

Figures 33 to 35 are waveform diagrams for explaining driving waveforms and the **change** of a transmitted **light intensity** according to the embodiment of the present invention.

## DESCRIPTION OF THE PREFERRED EMBODIMENTS

### A. Gradation Display in Bistable Ferroelectric Liquid

#### Crystal Display

Referring to a liquid crystal display in which a cell having a small thickness is...the polarity of an applied voltage is switched every frame, there can be obtained a **liquid crystal display** which has good reliability and no deflection of electrification. As compared with a device in...

...nematic liquid crystal is combined with a TFT, a response speed is higher and a **viewing** angle is wider.

### B. Ferroelectric Liquid Crystal Suitable For Gradation Display

In the active matrix type display shown in Fig. 11, when an electric field is...composition is 2 or less, a response speed is 200( $\mu$ )secs or less.

The **liquid crystal displays** 1, 2 and 3 are provided between polarizing plates which are placed in the state of "cross nicol". An electric field is applied to cause the **liquid crystal displays** 1, 2 and 3 to take one of the stable states. The absorption axis of the polarizing plate is caused to correspond to the extinction position of the **liquid crystal display**. In this state, a transmitted light intensity is measured while varying a voltage to apply...

...measurement are shown in Figs. 15, 16 (a), 16 (b) and 17. Referring to the **liquid crystal display** 2, measurement is carried out by causing the absorption axis of the polarizing plate to...

...the voltage is increased, the transmitted light intensity is continuously varied. By utilizing this characteristic, **display** with gray scale can be carried out. In Figs. 16 (a) and 16 (b), the...

...is caused to correspond to an extinction position having low stability. As compared with the **change** of the voltage, the transmitted **light intensity** is not rapidly **changed**. Consequently, the case shown in Fig. 16 (a) is suitable for the gradation **display**.

&lt;Example 8&gt;

The liquid crystal composition 1 of Table 4 is introduced into...

36/3,K/12 (Item 10 from file: 348)

DIALOG(R)File 348:European Patents

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00561946

Plasma addressing electro-optical device

Plasma-adressierbare elektro-optische Anordnung

Dispositif electro-optique adressable par plasma

PATENT ASSIGNEE:

SONY CORPORATION, (214022), 7-35, Kitashinagawa 6-chome Shinagawa-ku, Tokyo, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

Tanamachi, Shouichi, c/o Sony Corporation, 7-35, Kitashinagawa 6-chome, Shinagawa-ku, Tokyo, (JP)

LEGAL REPRESENTATIVE:

Muller, Frithjof E., Dipl.-Ing. (8661), Patentanwalte MULLER & HOFFMANN, Innere Wiener Strasse 17, 81667 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 554851 A1 930811 (Basic)

EP 554851 B1 970416

APPLICATION (CC, No, Date): EP 93101653 930203;

PRIORITY (CC, No, Date): JP 9247970 920204

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G02F-001/133 ; G09G-003/36; H01J-017/48

ABSTRACT WORD COUNT: 172

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	450
CLAIMS B	(English)	EPAB97	555
CLAIMS B	(German)	EPAB97	542
CLAIMS B	(French)	EPAB97	613
SPEC A	(English)	EPABF1	3937
SPEC B	(English)	EPAB97	3978
Total word count - document A			4387
Total word count - document B			5688
Total word count - documents A + B			10075

INTERNATIONAL PATENT CLASS: G02F-001/133 ...

...SPECIFICATION an enhanced resolution in display. In a plasma addressing display device, as in an ordinary **liquid crystal display** device, the **intensity** of the **light** transmitting through its panel is **changed** by an electro-optical means to execute significant visual representation. Accordingly, for further enhancing the...

...of screen printing procedure. Technically the maximum precision attainable is 80 microns for example. In **view** of the disadvantage mentioned, the present invention has a novel structure where the exposed portions...

...with the conventional value. Consequently it becomes possible to attain a higher definition in the **display** .  
Referring finally to Fig. 5, the operation of the plasma addressing display device will be...

...SPECIFICATION an extremely fine electrode pattern can be formed to consequently achieve an enhanced resolution in **display** . In a plasma addressing **display** device, as in an ordinary **liquid crystal display** device, the **intensity** of the **light** transmitting through its panel is **changed** by an electro-optical means to execute significant visual representation. Accordingly, for further enhancing the...

...of screen printing procedure. Technically the maximum precision attainable is 80 microns for example. In **view** of the disadvantage mentioned, the present invention has a novel structure where the exposed portions...

...with the conventional value. Consequently it becomes possible to attain a higher definition in the **display** .  
Referring finally to Fig. 5, the operation of the plasma addressing display device will be...

36/3,K/13 (Item 11 from file: 348)

DIALOG(R)File 348:European Patents

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00542152

Optical modulating element and apparatuses using it

Optisches Modulationselement und Vorrichtungen mit einem solchen Element

Element de modulation optique et dispositifs utilisant cet element

PATENT ASSIGNEE:

SHARP KABUSHIKI KAISHA, (260714), 22-22 Nagaike-cho Abeno-ku, Osaka-shi  
Osaka 545, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

Ishii,Yutaka, 1-5-5-905,Omiya-cho, Nara-shi, Nara-ken, (JP)

Yamamoto,Yoshitaka, 17-7,Izumihara-cho, Yamatokoriyama-shi, Nara-ken,  
(JP)

LEGAL REPRESENTATIVE:



White, Martin David et al (37651), MARKS & CLERK, 57-60 Lincoln's Inn  
Fields, London WC2A 3LS, (GB)  
PATENT (CC, No, Kind, Date): EP 528542 A2 930224 (Basic)  
EP 528542 A3 930804  
EP 528542 B1 980916  
APPLICATION (CC, No, Date): EP 92306559 920717;  
PRIORITY (CC, No, Date): JP 91179896 910719; JP 91179897 910719; JP  
91179898 910719  
DESIGNATED STATES: DE; FR; GB  
INTERNATIONAL PATENT CLASS: G02F-001/1347 ; G02F-001/1335 ; G02F-001/23  
ABSTRACT WORD COUNT: 217

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9838	1374
CLAIMS B	(German)	9838	1207
CLAIMS B	(French)	9838	1572
SPEC B	(English)	9838	17999
Total word count - document A			0
Total word count - document B			22152
Total word count - documents A + B			22152

INTERNATIONAL PATENT CLASS: G02F-001/1347 ...

...G02F-001/1335 ...

...G02F-001/23

...SPECIFICATION application, such as the use of the photomodulation  
element 1 in combination with active matrix liquid crystal display  
device for monochromatic display for multicolor or full-color display  
, a high speed is required in the color change. To operate the  
photomodulation element 1...crystal panels P21, P22 is controlled to be  
the value specified in Equation 15. The intensity distribution of the  
transmission light in this modified example was measured, and the  
distribution as shown in Fig. 9 was obtained.  
On the...

36/3,K/14 (Item 12 from file: 348)  
DIALOG(R)File 348:European Patents  
(c) 2000 European Patent Office. All rts. reserv.

00541101

Backlighting system for electro-optic displays  
Hintergrundbeleuchtungssystem für elektrooptische Anzeigen  
Système d'éclairage par transmission pour affichages à électro-optique  
PATENT ASSIGNEE:

LITTON SYSTEMS CANADA LIMITED, (959461), 25 City View Drive, Etobicoke  
Ontario M9W 5A7, (CA), (applicant designated states: DE;FR;GB)

INVENTOR:

Farrell, James Francis, 158 Beaver Bend Crescent, Etobicoke, Ontario  
M9B531, (CA)

LEGAL REPRESENTATIVE:

Godsill, John Kenneth et al (31031), Haseltine Lake & Co., Imperial  
House, 15-19 Kingsway, London WC2B 6UD, (GB)

PATENT (CC, No, Kind, Date): EP 540140 A1 930505 (Basic)  
EP 540140 B1 980325

APPLICATION (CC, No, Date): EP 92305457 920615;

PRIORITY (CC, No, Date): US 786484 911101

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G02F-001/1335

ABSTRACT WORD COUNT: 131

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9813	1098
CLAIMS B	(German)	9813	1022
CLAIMS B	(French)	9813	1227
SPEC B	(English)	9813	3882
Total word count - document A			0
Total word count - document B			7229
Total word count - documents A + B			7229

INTERNATIONAL PATENT CLASS: G02F-001/1335

...SPECIFICATION a balanced white color to optimize the color control of the transmitted light by the LCD . These low intensity miniature sources can be a combination of red, blue and green light sources respectively. The relative intensity of the red, blue and green light can be individually adjusted so that the color balance of the display is selectable.

According to a second aspect of the invention, there is provided a backlit...

36/3,K/15 (Item 13 from file: 348)

DIALOG(R)File 348:European Patents

(c) 2000 European Patent Office. All rts. reserv.

00399976

Transmission type liquid crystal display device.

Transmissive Flüssigkristall-Anzeigevorrichtung.

Dispositif a cristal liquide du type par transmission.

PATENT ASSIGNEE:

KONICA CORPORATION, (206972), 26-2, Nishishinjuku 1-chome, Shinjuku-ku, Tokyo 160, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

Asano, Kazuo, c/o Konica Corporation, 1 Sakura-machi, Hino-shi, Tokyo, (JP)

LEGAL REPRESENTATIVE:

Wood, Anthony Charles et al (37871), Urquhart-Dykes & Lord 91 Wimpole Street, London W1M 8AH, (GB)

PATENT (CC, No, Kind, Date): EP 392811 A2 901017 (Basic)

EP 392811 A3 901219

EP 392811 B1 931229

APPLICATION (CC, No, Date): EP 90303872 900410;

PRIORITY (CC, No, Date): JP 8992926 890414

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G02F-001/1335 ; G02F-001/137

ABSTRACT WORD COUNT: 208

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	815
CLAIMS B	(German)	EPBBF1	681
CLAIMS B	(French)	EPBBF1	866
SPEC B	(English)	EPBBF1	7341
Total word count - document A			0
Total word count - document B			9703
Total word count - documents A + B			9703

INTERNATIONAL PATENT CLASS: G02F-001/1335 ...

...G02F-001/137

...SPECIFICATION luminous intensity red light or by disposing filters on the backlight source so as to adjust the ratio of a red light luminous intensity to those of green and blue light .

In the invention, the backlight source has a luminous intensity of

not less than 200 cd/m(sup 2) and , more preferably not less than 400 cd/m(sup 2). The backlight source having such high luminous... degree). The nematic liquid crystal satisfying the above condition can regulate the variations in a **displayed** color, a driving voltage, and a response speed in a narrow range which are attributable...

...temperature variation in a range of a normal operation temperature, and therefore the highly reliable **liquid crystal display** device can be provided.

(5) A refractive anisotropy ( $\Delta n$ ) of a nematic liquid crystal...

...the above condition can make the liquid crystal cell thinner and results in providing the **liquid crystal display** device capable of responding very quickly to switching ON and OFF.

(6) Viscosity ( $\eta$ ) of a nematic **liquid crystal** at 20 (degree)C is preferably not higher than 30 cp. The nematic liquid crystal satisfying the...

...it possible to remarkably shorten a switching time of a liquid crystal cell, and the **liquid crystal display** device having more excellent response characteristic can be provided.

In the invention, a refractive anisotropy...

36/3,K/16 (Item 14 from file: 348)

DIALOG(R)File 348:European Patents

(c) 2000 European Patent Office. All rts. reserv.

00370563

**Integrated liquid crystal display and optical touch panel.**

Flüssigkeitskristallanzeige, integriert mit optischem Eingabeschirm.

Dispositif d'affichage a cristaux liquides integre avec ecran tactile optique.

PATENT ASSIGNEE:

TEKTRONIX, INC., (463982), Howard Vollum Park 14150 S.W. Karl Braun Drive  
P.O. Box 500, Beaverton Oregon 97077, (US), (applicant designated  
states: DE;FR;GB)

INVENTOR:

Meadows, David R., 15115 S W Barlow Court, Beaverton Oregon 97007, (US)

LEGAL REPRESENTATIVE:

Lawrence, Malcolm Graham et al (47876), Hepworth Lawrence & Bryer 15th  
floor Terminus House Terminus Street, Harlow Essex CM20 1XD, (GB)

PATENT (CC, No, Kind, Date): EP 365232 A2 900425 (Basic)  
EP 365232 A3 900613

APPLICATION (CC, No, Date): EP 89310529 891013;

PRIORITY (CC, No, Date): US 258420 881017

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06K-011/08; G06F-003/033; **G02F-001/133**

ABSTRACT WORD COUNT: 126

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	953
SPEC A	(English)	EPABF1	3084
Total word count - document A			4037
Total word count - document B			0
Total word count - documents A + B			4037

...INTERNATIONAL PATENT CLASS: **G02F-001/133**

...SPECIFICATION of the display device.

Summary of the Invention

This invention is directed to an integrated **liquid crystal display** and optical touch panel apparatus that eliminates the need for many discrete components and their...

...provides a resolution of a degree as high as the number of pixels of the **display**. The invention particularly comprises a **liquid crystal display** panel that has a plurality of pixels arranged in a matrix of multiple columns and rows. Each pixel is addressable by control circuitry for selectively **changing** the **intensity** of light propagating through the pixels. Visible **light** is projected toward the **display** panel and, except for the first column and last column of pixels and the first...

...pixels, the pixels are controlled in a conventional manner to form an image on the **display** panel.

Light emitters are positioned beneath the first column and beneath the first row of...

36/3,K/17 (Item 15 from file: 348)  
DIALOG(R) File 348:European Patents  
(c) 2000 European Patent Office. All rts. reserv.

00370118

**Liquid crystal display device for display with grey levels**  
**Flussigkristall-Anzeigevorrichtung zur Anzeige mit Grauepegeln**  
**Dispositif d'affichage a cristal liquide pour affichage avec niveaux de gris**

PATENT ASSIGNEE:

SHARP KABUSHIKI KAISHA, (260710), 22-22 Nagaike-cho, Abeno-ku, Osaka-shi, Osaka-fu 545-0013, (JP), (Proprietor designated states: all)

INVENTOR:

Nakagawa, Kenichi, 1923-42, Houren-cho, Nara-shi Nara-ken, (JP)

Numao, Takaji, Akebono-ryo 2613-1, Ichinomoto-machi, Tenri-shi Nara-ken, (JP)

LEGAL REPRESENTATIVE:

Brown, Kenneth Richard et al (28831), R.G.C. Jenkins & Co. 26 Caxton Street, London SW1H 0RJ, (GB)

PATENT (CC, No, Kind, Date): EP 361981 A2 900404 (Basic)  
EP 361981 A3 900816  
EP 361981 B1 951220  
EP 361981 B2 991124

APPLICATION (CC, No, Date): EP 89310055 891002;

PRIORITY (CC, No, Date): JP 88248800 880930

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G02F-001/133 ; H04N-003/12; G02F-001/1343

ABSTRACT WORD COUNT: 165

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9947	409
CLAIMS B	(German)	9947	363
CLAIMS B	(French)	9947	430
SPEC B	(English)	9947	5269
Total word count - document A			0
Total word count - document B			6471
Total word count - documents A + B			6471

INTERNATIONAL PATENT CLASS: G02F-001/133 ...

...G02F-001/1343

...SPECIFICATION with grey levels can be realized.

Referring to Fig. 4, the abscissa represents the voltage **applied** to a pixel and the ordinate represents the intensity of the transmitted light in the pixel. If the voltage applied to the pixel increases, the transmitted **light intensity** in the pixel begins to **change** at a **prescribed** threshold voltage VTH)). If the applied voltage is higher than the threshold voltage VTH)), the...

...applied voltage and it is saturated at a saturation voltage VS)).  
In the following, a **method** of controlling the voltage applied to  
the pixels for displaying the pixels with eight grey levels will be  
described. It is assumed...end point are defined as VTH)) = V0)) and  
V1)), V2)), ..., V7)) = VS)). In order to **display** a certain pixel with  
the fifth grey level, a voltage corresponding to the potential difference  
...

...pixel. The transmitted light intensity in that case will be about 4/7.  
In the **LCD** using this method, a **display** with 16 grey levels can be  
attained.  
The second method for display with grey levels...

36/3,K/18 (Item 16 from file: 348)  
DIALOG(R)File 348:European Patents  
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00369025

**Display device.**

**Anzeigevorrichtung.**

**Dispositif d'affichage.**

PATENT ASSIGNEE:

SHARP KABUSHIKI KAISHA, (260710), 22-22 Nagaike-cho Abeno-ku, Osaka 545,  
(JP), (applicant designated states: DE;FR;GB)

INVENTOR:

Kuratate, Tomoaki, 18-11, Torimi-cho 3-chome, Nara-shi Nara-ken, (JP)  
Koden, Mitsuhiro, 27-6, Nishi-Kitsuji-cho, Nara-shi Nara-ken, (JP)  
Hamada, Hiroshi, 177, Aoyama 7-chome, Nara-shi Nara-ken, (JP)

LEGAL REPRESENTATIVE:

Brown, Kenneth Richard et al (28831), R.G.C. Jenkins & Co. 26 Caxton  
Street, London SW1H 0RJ, (GB)

PATENT (CC, No, Kind, Date): EP 357463 A2 900307 (Basic)  
EP 357463 A3 901003  
EP 357463 B1 940518

APPLICATION (CC, No, Date): EP 89308915 890904;

PRIORITY (CC, No, Date): JP 88220860 880902

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: **G02F-001/133**

ABSTRACT WORD COUNT: 178

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPABF1	513
SPEC B	(English)	EPABF1	6501
Total word count - document A			0
Total word count - document B			7014
Total word count - documents A + B			7014

INTERNATIONAL PATENT CLASS: **G02F-001/133**

...SPECIFICATION 13, 14 are ignored.

FIG. 8 is a graph for explaining the characteristics of the **liquid crystal display** device 1. To the liquid crystal device 1 composed in this way having a film...

...g. 250 Hz) as shown in FIG. 8 (1) were applied. At this time, the  
**changes** in the **intensity** of the transmitted **light** were measured, and  
the results are shown in FIG. 8 (2). As clear from the diagram it is  
understood that the **liquid crystal display** device 1 realizes three  
stable operating states, that is, the state of completely transmitting  
the...

36/3,K/19 (Item 17 from file: 348)  
DIALOG(R)File 348:European Patents  
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00270349

**A method of obtaining optical modulation.**

**Methode zum Erzielen von optischer Modulation.**

**Methode pour l'obtention d'une modulation optique.**

PATENT ASSIGNEE:

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PATENT (CC, No, Kind, Date): EP 260073 A2 880316 (Basic)  
EP 260073 A3 881005  
EP 260073 B1 921111

APPLICATION (CC, No, Date): EP 87307812 870904;

PRIORITY (CC, No, Date): GB 8621438 860905

DESIGNATED STATES: DE; FR; GB; NL

INTERNATIONAL PATENT CLASS: G02F-001/21 ; G02F-001/13

ABSTRACT WORD COUNT: 113

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	399
CLAIMS B	(German)	EPBBF1	380
CLAIMS B	(French)	EPBBF1	455
SPEC B	(English)	EPBBF1	3497
Total word count - document A			0
Total word count - document B			4731
Total word count - documents A + B			4731

INTERNATIONAL PATENT CLASS: G02F-001/21 ...

...G02F-001/13

...SPECIFICATION range 10-100 milliseconds for E43 and similar nematic  
materials. This is adequate for conventional **liquid crystal displays**  
, but it is unacceptably long for optical signal processing and other  
optical modulation applications.  
Referring...

36/3,K/20 (Item 18 from file: 348)  
DIALOG(R)File 348:European Patents  
(c) 2000 European Patent Office. All rts. reserv.

00259398

**Liquid crystal display device**

**Flussigkristall-Anzeigevorrichtung**

**Dispositif d'affichage a cristal liquide**

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PATENT (CC, No, Kind, Date): EP 259822 A1 880316 (Basic)  
EP 259822 B1 920408

APPLICATION (CC, No, Date): EP 87113073 870908;

PRIORITY (CC, No, Date): JP 86213774 860912

DESIGNATED STATES: CH; DE; FR; GB; LI; NL

INTERNATIONAL PATENT CLASS: G02F-001/133

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LANGUAGE (Publication, Procedural, Application): English; English; English  
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CLAIMS B	(English)	EPAB96	1081
CLAIMS B	(German)	EPAB96	834
CLAIMS B	(French)	EPAB96	1066
SPEC B	(English)	EPAB96	5585
Total word count - document A			0
Total word count - document B			8566
Total word count - documents A + B			8566

INTERNATIONAL PATENT CLASS: G02F-001/133

...SPECIFICATION in application for high multiplex driving system. For example, in a liquid crystal display device with the display area of about A4 size, the duty ratio in multiplex driving has been practically preferred to be 1/200 or higher, but said duty ratio practically applied in the liquid crystal display device is about 1/100, with its contrast ratio (ratio of luminance on selected elements to that on unselected...

...as "pretilt angle") is greater than 5(degree). According to this liquid crystal display device, since the intensity change of transmitted light to the change in applied voltage is steep, it is stated that a high contrast ratio of 19.6 can be realized...

...the case of multiplex driving at a duty ratio of 1/100.

However, in this liquid crystal display device, no sufficient consideration has been given to the bistable effect and, for this reason, there is the problem that response is slow when the liquid crystal display device is subjected to multiplex driving at a high duty ratio. More specifically, in the liquid crystal cell of this liquid crystal display device, there ordinarily occurs the so-called hysteresis phenomenon in which the intensity change of transmitted light or the reflected light during increasing the applied voltage is different from that during decreasing of the applied voltage. Due to the bistable...

...time for on-off may be elongated. Also, as the result of these problems, the display badness is liable to occur by non-uniformity of the liquid crystal layer thickness, the temperature change, etc. For... attained by suitably mixing various liquid crystal materials to give a liquid crystal composition.

The liquid crystal display device of the present invention satisfies the conditions (a) to (c) as described above, and therefore even in the case of multiplex driving with high duty ratio, the intensity change of the transmitted light or the reflected light to the applied voltage can be made steeper to give sufficiently high contrast ratio, and also it has excellent response...

...high multiplex driving can be performed with a low driving voltage in a liquid crystal display device, whereby it becomes possible to obtain a

liquid crystal **display** device of low cost and small power consumption.

When the value  $(\Delta)(\epsilon)/(\epsilon)(\text{box} - \text{middle bottom})$  is excessively small, the driving voltage becomes higher and also the **intensity change** of the **transmitted light** or the reflected light to the applied **voltage** becomes moderate, whereby it may become sometimes difficult to obtain sufficiently high contrast ratio.

Next, other preferable conditions in preparing practically the **liquid crystal display** device according to the present invention are to be described.

(i) It is preferred that...

...response speed, etc., caused by temperature changed within the range of temperature conventionally used for the **liquid crystal display device** to reduced levels, whereby a **liquid crystal display** device with **high** reliability can be obtained.

(ii) It is preferable that the liquid crystal materials should have ...

...preferable condition, the turn-on time in the liquid crystal display device can be made **extremely** short to give a device with further excellent response characteristic.

(iv) It is preferred that the following relationship formula (3) should be valid between the twisting...

...2) is small, sufficient bistable effect cannot be obtained in some cases, and consequently the **intensity change** of the transmitted **light** or the reflected **light** to the applied voltage becomes moderate to sometimes lower the contrast ratio. On the other...

...and consequently the time required for on-off becomes longer to sometimes lower the response **characteristic**, and also disturbance of the liquid crystal alignment in shape of stripes will readily occur in some cases.

Further, in the present invention, the product  $(\Delta)n.d$  of a **refractive** index anisotropy  $(\Delta)n$  of

36/3,K/21 (Item 19 from file: 348)  
DIALOG(R)File 348:European Patents  
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00258032

Optically active 2-methyl 1,3-propanediol derivatives, liquid crystal compositions comprising them and optical switching element.

Optisch-aktive 2-Methyl-1,3-propandiol-Derivate, sie enthaltende flüssigkristalline Zusammensetzungen und optisches schaltendes Element.  
Derives optiquement actifs de methyl-2 propanediol-1,3, cristaux liquides les contenant et element de commutation optique.

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PATENT (CC, No, Kind, Date): EP 257457 A2 880302 (Basic)  
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EP 257457 B1 901031

APPLICATION (CC, No, Date): EP 87111688 870812;

PRIORITY (CC, No, Date): JP 86189127 860812

DESIGNATED STATES: CH; DE; FR; GB; LI

INTERNATIONAL PATENT CLASS: C07C-069/22; C07D-239/34; C07D-239/26;  
C07D-213/30; C07D-237/14; C09K-019/12; C09K-019/34; G02F-001/13

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FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPABF1	546
SPEC B	(English)	EPABF1	2155
Total word count - document A			0
Total word count - document B			2701
Total word count - documents A + B			2701

...INTERNATIONAL PATENT CLASS: G02F-001/13

...SPECIFICATION been subjected to parallel aligning treatment by rubbing the surface thereof, to thereby produce a **liquid crystal display** element. This element was placed between two polarizers crossed at right angles, and an electric field was applied thereto. Upon application of (+-)10 V, a **change** in transmission **light intensity** was observed. The response time was determined from the **change** in transmission **light intensity**, and the PS was determined according to a Sowyer-Tower method. The results obtained are...